

BOWAL TANKON AND BOWAL TOUPPE MAMA, DALABA

ABSTRACT

Bowal Tankon is home to the last surviving known global population of Vernonia djalonensis and Emilia djalonensis, an endemic species to the Fouta Djallon area of the Guinea highlands. Bowal Tankon is under immediate threat from construction and urbanisation. Three other Vulnerable species are also thought to be present: Kotschya lutea, Eriocaulon sessile, Indigofera macrocephala.

Charlotte Couch, Muhammad Yaya Diallo and Martin Cheek











TIPAs Report: Bowal Tankon and Bowal Touppe Mama, Dalaba

IPA criteria under which the site qualifies: A (i, iii, iv), C (ii)

IPA ASSESSMENT RATIONALE

Bowal Tankon and Bowal Touppé Mama is home to the last surviving known global populations of *Vernonia djalonensis and Emilia djalonensis*, endemic species to the Fouta Djallon area of the Guinea highlands. Other historic sites have been searched at Mali and between Timbo and Ditinn, neither species have been rediscovered in these places. Bowal Tankon is under immediate threat from construction and urbanisation. Three other vulnerable (VU) species are also thought to be present: *Kotschya lutea*, *Eriocaulon sessile*, *Indigofera macrocephala* from historical records.

SITE OVERVIEW

Site Name: Bowal Tankon and Bowal Touppé Mama	
Country: Guinea	Administrative region: Dalaba
Central co-ordinates: 10° 39′ 31.8′′ N, -12° 12′ 52.9′′ W	Area (km²): 5 km
Altitude minimum: 1290 m	Altitude maximum: 1350 m

SITE DESCRIPTION

Bowal Tankon is southern part of the Diaguissa plateau which runs north east- south west across National Route 5. The plateau is made up of a solid outcrop of iron rich laterite covered by thin soils with some gravel and deeper soils upslope. In the wet season there is a marsh area on the upper part of the plateau area. Due to it being alongside the road, housing has already sprung up and a new estate area has been marked out and lots assigned. The North West side of the plateau, Bowal Touppé Mama, has a less intact outcrop and has areas which are more gravelly and with deeper soils compared to Bowal Tankon. Both areas have some human influence either from construction, pastoralism or agriculture. The vegetation is typical of the bowal of high altitude and shares affinities with the iron-rich bowal found in the mountains of Guinée Forestière. Areas further north in the Fouta Djallon towards Labé and Pita are not iron rich and therefore have a different composition.



Image taken from Google Earth showing the proposed area for protection as an IPA.

BOTANICAL SIGNIFICANCE

The Diaguissa plateau is the only known surviving site globally for *Vernonia djalonensis* and *Emilia djalonensis*. There have been recent field campaigns to verify populations known from old collections, and areas that resembled the Diaguissa plateau on satellite imagery have also have unfortunately not yielded any new or extant populations. The largest part of the population of *Vernonia djalonensis* is found on the lower slopes of Bowal Tankon with a sparser number found on Bowal Touppé Mama. *Emilia djalonensis* is known from one Chevalier collection on the Diaguissa plateau of which this is a part. There have been no recent collections of this species. The lower slope of Bowal Tankon is populated with other common bowal species; upslope where there is a temporary marsh in the wet season, there is a large population of *Kotschya micrantha*, one of only 5 sites known in the Fouta Djallon. On Bowal Touppé Mama a small sparse population of *Mesanthemum tuberosum* (VU) has been recorded. Three other vulnerable species, *Kotchya lutea, Eriocaulon sessile* and *Indigofera macrocephala* are also recorded from this area.

GENERAL HABITAT AND GEOLOGY DESCRIPTION

Ferralitic hard pan (impervious). Bowal grassland on a continuous outcrop of concretised iron pan with very thin soils. Different to other bowal in the area as there is very little gravel present.

CONSERVATION ISSUES

Major current threats are from 1.) Housing (urbanisation): this area has already been marked out for building plots and most plots have been sold (*Pers. Comm.* Mayor of Dalaba, July 2017). 2) Chinese gravel crushing plant installed after Nov. 2016. Much of the upper slope of Bowal Tankon has been cleared for installation and there was evidence of rubbish burning outside the plant in July 2017 Pers. Obs. C. Couch).

PROTECTED AREA STATUS AND MANAGEMENT

This area is currently unprotected. It shares governance between the local Mayors office and the state.

THREATS

Urbanisation from a housing estate that is likely to cover up to 80% of the population of *Vernonia djalonensis* and a gravel crushing plant which covers a small part of the area.

THREAT LEVEL: High

Criterion A: Threatened Species

			Site contains		For KBA compatibility: Site contains				
Criterion A taxon present	IPA subcriterio n	IUCN redlist assessment	≥ 1% of global population	≥ 5% of national population	Is 1 of 5 best sites nationally	≥ 10% of global population	Entire global population (single-site endemic)	Species is of socio-economic importance	*Abundance at site
[Genus, species, Author, [infra rank, infra name, infra Author]]	[A(x)]	[category and criteria]	0	0	0	0	0		
Vernonia djalonensis		CR B2ab(iii) In review			Yes		Yes	Medicinal, small- scale	Frequent
Kotschya micrantha		VU	Yes	Yes	Yes	Possibly	No	No	Infrequent
Mesanthemum tuberosum		VU	No	No	No	No	No	No	Scarce
Kotschya lutea		VU	No	No	No	No	No	No	Unknown
Indigofera megacephala		VU	No	No	No	No	No	No	Unknown
Emilia djalonensis		CR	No	No	No	No	No	No	Unknown last collected from Dalaba area in 1913.
Eriocaulon sessile		VU	No	No	No	No	No	No	Unknown

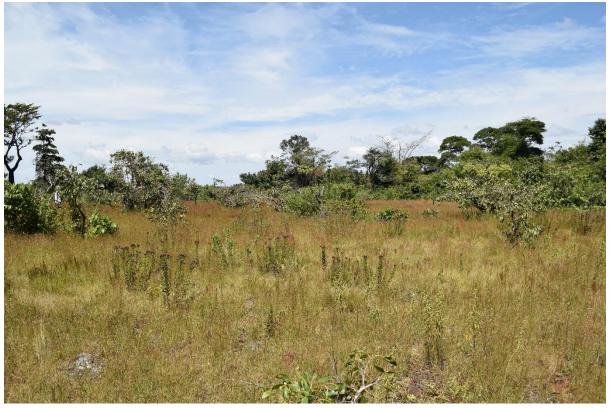
Criterion B: Botanical Richness

Insufficient data available

Criterion C: Threatened Habitat

			Site contains		For KBA compatibility: Site contains			
*Habitat type	IPA subcriterion	IUCN redlist	≥ 5% of	≥ 10% of	For CR and	For VU	For range	Estimated
,,	(automatically	assessment	national	national	EN	habitats: ≥	restricted	area at site
	populated from	(string	resource	resource	habitats: ≥	10% of	habitat: ≥	(if known)
	habitat look-up	automatically	(for C(i)	(for C(iii))	5% of	global	20% of	
	table)	populated from	and C(ii))		global	resource	global	
		look up table)			resource		resource	
			0	0	0	0	0	
High altitude				Yes				5km²
ferralitic								JKIII
bowal,								
continuous								
rock outcrop.								

Bowal Tankon and Bowal Touppé Mama in pictures



Upper section of Bowal Tankon October 2016 with *Vernonia djalonensis*



Lower part of Bowal Tankon in October 2016 with *Vernonia djalonensis*



Evidence of construction at Bowal Tankon.



Marsh area on upper plateau of Bowal Tankon.



Bowal Tankon dry season, January 2018.



Bowal Touppé Mama October 2016.



Vernonia djalonensis in flower, October 2016.



Vernonia djalonensis in fruit, January 2018.